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# **SECTOR 8**

### COAST OF PANAMA—PUNTA BURICA TO PUNTA MALA

**Plan.**—This sector describes the S coast of Panama from Punta Burica to Punta Mala with adjacent islands. The descriptive sequence is E and then SE.

#### **General Remarks**

**8.1 Winds—Weather.**—The predominant wind along this section of coast from November to April is NE, and from June to September, is SW. During the dry season, from November to April, there is a tendency for the prevailing wind to vary locally. Seasonal winds are irregular and are modified by the alternation of land and sea breezes, interrupted by calms and occasional squalls.

Tides—Currents.—Due to the influence of the Equatorial Countercurrent, an E set will usually be experienced within 20 miles of the coast in the vicinity of Morro de Puercos. The current flowing out of the W side of the Gulf of Panama in the area of Punta Mala will join this current and then set to the SW, gradually turning to the W, and so passing into that part of the South Equatorial Current which flows W between the equator and 4°N. From June to November, the outflow from the Gulf of Panama does not extend S of about 6°N. From June to August, the emerging water turns W or NW and passes into the NW flow along the W coast of Central America, reversing the set of the coastal flow.

## **Punta Burica to Puerto Armuelles**

**8.2** Bahia de Charco Azul (8°10'N., 82°40'W.), lying between Punta Burica and Isla Parida, 30 miles E, extends 16 miles N of a line joining these two positions. Depths in the central and W parts of the bay are deep, but are moderate in the N and E parts. The W shore of the bay between Punta Burica and Punta Balsa, 2.5 miles N, has a coastal bank extending 1 to 1.8 miles offshore, with the sea breaking on it at LW. The coast between Punta Balsa and Puerto Armuelles is high. The N shore is low and intersected by several rivers.

**Punta de Piedra** (8°13'N., 82°53'W.), located 8 miles N of Punta Balsa, projects slightly E into the bay, affording protection for the crude oil transshipment terminal, Charco Azul, which lies close N of the point.

**Charco Azul** (8°13'N., 82°52'W.) is an oil storage and transshipment terminal for tankers of up to 265,000 tons. It is a transfer point for Alaskan oil from VLCC's to either transcontinental pipeline or smaller vessels for canal transit. The pipeline connects Charco Azul to Chiriqui Grande Terminal on the Atlantic coast. The terminal consists of three berths numbered 1 to 3, N to S. Additional breasting dolphins are provided at the head of the jetties, or a pipeline in the case of Berth No. 3.

**Depths—Limitations.**—The W side of the bay is very deep. The 30m curve approaches within 0.3 mile of the coast above Punta de Piedra.

Berth No. 1 is designed to accommodate vessels of up to 265,000 dwt and has an alongside depth of 24.4m. The jetty, which conducts both loading and discharging, is connected to the shore by a trestle.

Berth No. 2 can handle vessels of up to 90,000 dwt and has a least depth alongside of 16.8m. The jetty, which is equipped for both loading and discharging, is also connected to the shore by a trestle.

Berth No. 3 can handle vessels of up to 60,000 dwt and has a least depth alongside of 15.2m. The jetty, used for loading purposes only, is connected to shore by a submarine pipeline.

**Pilotage.**—Pilotage is compulsory. Services are available 24 hours a day and are supplied by the terminal. Pilots for discharging tankers board 3.5 miles SE of Berth No. 2 and for loading vessels, 3 miles E of Berth No. 1. The vessel's ETA should be sent 72 hours in advance. Pilots may be contacted on VHF channel 16.

**Anchorage.**—The best anchorage may be taken according to depth in the NE section of Bahia de Charco Azul.

# Puerto Armuelles (8°16'N., 82°52'W.)

World Port Index No. 15460

**8.3** Puerto Armuelles, 3 miles NNE of Charco Azul, lies close S of the mouth of the Rio Rabo del Puerco. The port is owned and operated by United Brands Company and engaged primarily in the export of bananas.

**Winds—Weather.**—The port is sheltered from all except E and SE winds. There are seldom winds of high velocity.

Dense haze in the early morning can make the landmarks difficult to distinguish.

**Tides—Currents.**—Mean spring range of tide is 3m, and mean neaps is 1.5m.

A heavy swell is continuous in the port. During May and June, a SE swell although usually light, may be sufficient to cause a vessel's pounding against the pier unless breasted off.

Currents are strong and irregular.

**Depths—Limitations.**—Depths in the approach are deep, shoaling gradually as the pier is approached. Access to the pier is free of obstructions.

The pier, about 460m long, extends from shore in a SE direction. There is 137m of berthing space along the E side of the pier, in a minimum depth of 12.2m. Vessels berth starboard side-to using the port anchor.

The W side of the pier is available only to small coasters with drafts of 2.4 to 2.7m.

**Aspect.**—In the approach to the port, two large silver-colored tanks stand on the shore 0.7 mile W of the pier end. Two framework radio towers, each 31m high and 91m apart, stand 0.9 mile NNE of the pier. A green light is shown from a church 0.5 mile NW of the pier. A light is shown from the head of the pier.

**Pilotage.**—Pilotage is compulsory for berthing operations. Vessels should send their ETA 48 and 24 hours in advance through their agent. Pilots board 1 mile E of the pier.

**Anchorage.**—Vessels may anchor in depths of 15 to 30m about 1 mile E of the pier.

### **Puerto Armuelles to Puerto Nuevo**

**8.4** The coast between the mouth of the Rio Rabo del Puerco and Punta Boca de Hacha (Punta San Pedro), 20 miles E, is intersected by numerous small rivers.

**Isla Parida** (8°06'N., 82°21'W.), which lies 12 miles SE of Punta Boca de Hacha, is well-wooded, high, and of irregular shape. Numerous above and below-water dangers surround this island on all sides. A light is shown from the SW part of the island

**La Bandera** (8°03'N., 82°25'W.), a steep-to rock with a depth of less than 1.8m, lies about 4 miles SW of Isla Parida.

Islas Ladrones (7°52'N., 82°26'W.), three rocky, barren islets which occupy an area about 1 mile in extent, lie 14 miles SSW of Isla Parida. Rocks lie within 1 mile NNE of the islands, and a bank on which there are least depths of 5.5m extends 8 miles NNE. A light is shown from the 75m high summit of the island. The islands have been reported to be radar conspicuous

**Rio Chiriqui** (8°15′N., 82°23′W.), which is fronted by numerous islets, shoals, and other dangers, lies between Punta Boca de Hacha to the NW, Isla Parida to the S, and the mainland to the NE.

The delta is intersected by three principal channels; Boca de San Pedro, Boca Brava, and Boca Chica. Boca de San Pedro is the deepest and most direct approach to the Rio Chiriqui and Pedregal. The other two channels have silted and are no longer in use.

The channel leading through Boca de San Pedro should not be entered without local knowledge.

**8.5 Pedregal** (8°22'N., 82°26'W.), a small village, lies at the head of Estero Pedregal. General cargo, sugar, and fertilizer are handled. Fishing vessels also utilize the port. There is a pier, 86m long, with depths of 3.4 to 5.2m alongside. Vessels can enter only at HW during daylight hours. Maximum vessel draft allowed is 4.5m. Pilotage is compulsory. An ETA must be given 48 hours in advance. Pilots may be contacted on VHF channel 16. All vessels intending to enter the port must anchor in the vicinity of the Fairway Buoy to await the pilot.

The numerous islets, rocks, and other dangers, which extend up to 10 miles E of Isla Parida and then N to the coast, are intersected by several deep passages leading to Boca Chica, the E entrance of the delta.

Islas Viudas (8°06'N., 82°10'W.), a group of islets extending N and NW of a detached rock, 4.6m high, lies on the S side of the approach to Boca Chica about 9 miles E of Isla Parida. The rock is usually marked by breakers. A reef, with several above and below-water rocks on it, extends 0.5 mile SE

**Islas Monitas** (8°09'N., 82°10'W.) are two islets on a reef lying about 3 miles N of Islas Viudas. A light is shown from the SE point of the NE islet.

**Islas Secas** (7°59'N., 82°02'W.), a group of islands and rocks which cover an area approximately 5 miles in extent, lies 11

miles SE of Islas Viudas. Isla Cavada, in the center of the group, is 94m high.

**La Bruja** (7°59'N., 81°59'W.), a 0.6m high rock, lies 3 miles E of the N extremity of Isla Cavada and is a formidable danger, especially at night.

The coast to the E of Boca Chica, as far as the entrance leading to Puerto Nuevo, is intersected by several rivers and streams

**Isla Silva de Afuera** (8°05'N., 81°49'W.), 43m high and wooded, lies 4.5 miles W of the S entrance point leading to Puerto Nuevo.

**8.6 Puerto Nuevo** (8°06'N., 81°42'W.), which lies on the E bank of an estuary into which several rivers discharge, is entered between Punta Entrada on the S and Punta Aguda, 1.8 miles ENE, the S extremity of Isla Insolita.

The position of the entrance may be recognized by Sugarloaf Hill (8°10'N., 81°46'W.), 165m high, which stands 5 miles N of Punta Entrada, and by Isla Silva de Afuera and Isla Silva de Tierra, which lie W of the entrance.

The entrance channel is about 0.2 mile wide between the 10m curves until within 0.3 mile of Isla Intrusa, beyond which no vessel should attempt to proceed if drawing more than 3.7m. At HW, vessels drawing up to 3.7m can reach the wharf at San Juan Enfrente, but will ground alongside at LW.

Anchorage can be taken by large vessels in depths of 9 to 11m about 1.3 miles WSW of Punta Entrada. Deep-draft vessels can anchor in mid-channel, in depths of 14 to 16m, about 0.5 mile E of Punta Entrada.

# Puerto Nuevo to Isla Jicarita

**8.7 Morro Negrito** (8°02'N., 81°43'W.), 91m high, is a bluff headland joined to the land to the N by a narrow isthmus, and lies 3 miles S of Punta Entrada.

Between Morro Negrito and Punta Pajaron, 9 miles SE, the coast is fronted by a shallow bank which extends up to 1.5 miles offshore in places. The bank is steep-to and breaks on its edge with a SE swell. Between Punta Pajaron and Punta Jabali, 13 miles SE, the coast is irregular and indented by a number of small bays. The land gradually rises to high hills and peaks close inland as Punta Jabali is approached.

**Bahia Honda** (7°45′N., 81°32′W.), entered between Punta Guarida (Punta del Miel) and Punta Jabali, is deep, sheltered, and provides excellent shelter. Tidal currents have a velocity of 0.5 to 1 knot. Drying flats fringe the E and NE ends of the bay, but elsewhere the shores are generally steep-to.

Isla Talon, 80m high, lies in the inner reaches of the harbor and divides it into two parts, known as Bahia Chinche to the W and Bahia Legamo to the E. Two small islets lie off the W and S sides of Isla Talon.

Anchorage can be taken anywhere within the harbor, but the best berth for large vessels is in Bahia Chinche in a depth of 27m, mud, 0.6 mile W of Isla Calentador.

Confined anchorage may be taken in Bahia Legamo in depths of 9 to 18m.

**Islas Contreras** (7°50'N., 81°47'W.), lying NW of Bahia Honda, consists of two groups of uninhabited islands and rocks separated by a deep channel about 1.5 miles wide.

**Isla Uva** (7°49'N., 81°46'W.), the largest of the S group, lies 15 miles NW of Punta Jabali and 9.5 miles offshore. A light is shown from a point on the SW side of the island.

Roca Prosper, which has the appearance of a black tower, is 2.7m high and lies 1.3 miles S of Isla Uva. The other islets and rocks of the group lie within 1 mile of the remaining coastline of Isla Uva.

**Isla Brincanco** (7°52'N., 81°35'W.), the largest of the N group, is 196m high and lies 3 miles N of Isla Uva. The other islets which make up the group lie within 0.8 mile of Isla Brincanco.

Anchorage can be taken in a depth of 55m about 0.5 mile N of Isla Brincanco. Small vessels can anchor close N of the islet in a depth of 26m.

**Isla Canal de Afuera** (7°41'N., 81°38'W.), 201m high, lies 5 miles WSW of Punta Jabali and can be passed on either side. A small islet lies close N of the W end of the island. A light is shown from the S side of the 'island.

**8.8** Isla Rancheria (7°39'N., 81°42'W.), 130m high, lies within 1.5 miles of Punta Baltasar, the N end of Isla de Coiba. Several islets and sunken rocks lie within 1.3 miles NW and 0.8 mile NE of the islet.

**La Viuda** (7°39'N., 81°41'W.), a dangerous pinnacle rock with a depth of 8.5m, lies 0.8 mile ENE of Isla Rancheria.

**Isla de Coiba** (7°30'N., 81°48'W.), the largest island off this section of coast, is mountainous and heavily wooded, but there is some swampy land on its W side. The island rises to an elevation of 427m in its central part.

The W side of the island between Punta Baltasar, its N extremity, and Punta Hermosa, 10 miles S, is bordered by deep water and may be approached closely. Punta Hermosa, together with Punta Adelarda, 2 miles S, form the W extremity of the island. Punta Hermosa has been reported to be radar conspicuous.

Between Punta Adelarda and Punta Anegada, the SE extremity of the island, the coast remains steep-to as far SE as Punta Brigida (7°22'N., 81°47'W.), but E of this point several detached dangers lie within 3 miles of the shore.

A bank, with a least depth of 6.5m, lies 1.5 miles S of Punta Anegada. Breakers extend offshore for about 1 mile during the winter season when SW winds prevail.

Anchorage can be taken off various parts of the island, but there are no harbors to provide shelter.

**Caution.**—The island has a penal colony on its E side and landing is prohibited without prior permission of the Panamanian government.

A local magnetic anomaly was reported to exist off the S coast of Isla de Coiba between positions 14 miles SE and 12 miles SSW of Punta Anegada.

Hill Rocks, comprised of two rocks awash, lies 5.5 miles WSW of Punta Anegada.

Passage Rocks, a group of rocks awash, lies 7.3 miles WSW of the same point and 1.5 miles offshore.

Between Punta Anegada and Punta Fea, 5 miles NW, the coast is fronted by foul ground which extends up to 1 mile offshore in places.

**Bahia Damas** (7°27′N., 81°40′W.), entered between Punta Fea and Punta Clara, 7 miles NNE, is the principal anchorage of the island. There are depths of more than 50m between the entrance points, shoaling to a depth of 18m about 1 mile offshore. Anchorage can be taken as convenient. It is not advisable to anchor in depths of less than 27m. The penal colony lies along the N shore of this bay.

**Ensenada Arenas** (7°34'N., 81°42'W.), entered N of Punta Damas, provides anchorage in its central part in depths of 9 to 36m.

**8.9** Isla Montuosa (7°28'N., 82°15'W.), a small and heavily wooded island, lies 21 miles W of Isla de Coiba and rises to a height of 155m. Foul ground extends about 1.5 miles W and 0.5 miles S from this island.

Isla Montuosa has been reported to be radar conspicuous. A light is shown from the highest point on the SW side of the island. Banco Hannibal (7°23'N., 82°03'W.), with a least depth of 17m, lies 12 miles ESE of Isla Montuosa.

**Isla Jicaron** (7°16'N., 81°48'W.), heavily wooded and uninhabited, rises to a height of 418m. This island is separated from Isla de Coiba to the N by Canal de Jicaron, a passage about 3 miles wide. Tidal currents up to a rate of 2 knots have been observed in the channel. The dangers in this passage have been previously described. A dangerous group of rocks, with depths of less than 1.8m, which do not always break, lies about 2 miles WNW of the S point of the island. Isla Jicaron has been reported to be radar conspicuous.

**Isla Jicarita** (7°13′N., 81°48′W.), close S of Isla Jicaron, is heavily wooded with bold cliffs at its S end, and rises to a height of 136m. The passage separating this island from Isla Jicaron to the N is shoal. Isla Jicarita has been reported to be radar conspicuous. A light marks the S end of the island.

**Caution.**—Breakers have been observed 0.5 mile S of the island.

### Isla Jicarita to Punta Mariato

**8.10** Islotes de Cativos (7°41'N., 81°29'W.), lying 1 mile offshore, small in extent, and fringed by foul ground on their N side, lie 4 miles ESE of Punta Jabali. Anchorage can be taken by vessels of any size about 1.5 miles NE of the largest islet and 0.5 mile offshore. Small vessels can anchor about the same distance to the NW of the same islet.

Between Islotes de Cativos and Punta Brava, 16 miles E, the coast remains high and bold. Several small islets lie within 1 mile offshore along this section of coast. Vessels should not transit the area at a distance of less than 3 miles offshore.

Golfo de Montijo (7°38'N., 81°07'W.), entered between Punta Brava on the W and Punta Duartes, 16 miles ESE, is obstructed by two islands which lie across the entrance. The channel of approach leads E of these islands and extends 17 miles N to the mouths of the Rio San Pablo and Rio San Pedro. The W side of the gulf is obstructed by extensive shallow flats intersected by shoal passages.

The Rio San Pedro is navigable as far as Puerto Mutis, 11 miles above Isla Leonis (7°44'N., 81°07'W.), by vessels with a length of not more than 30.5m and a draft of not more than 3.3m.

The Rio San Pablo is more difficult to navigate, but at HW a vessel with a draft of 3m can proceed upriver as far as Sona, 36 miles above Isla Leones.

Currents at the entrance of the gulf attain a velocity of up to 2 knots, but elsewhere are of varying strength.

**Isla Cebaco** (7°32'N., 81°09'W.), a high, long, narrow island, lies across the entrance of the gulf about midway between the entrance points. Several hills rise on the island, the highest peak attaining an elevation of 355m about 4.5 miles from Punta Zurron, the SW point of the island. A light is shown from a square framework tower on Punta Zurron.

Pilar de Sal, lying 1.3 miles S of Punta Zurron, is a rock named for its resemblance to a pillar of salt. Other small islets and rocks lie in this vicinity.

English Rock, which breaks at half-tide, has a depth of 1.2m, and lies about 1 mile E of Punta Campana, the NE extremity of Isla Cebaco.

Anchorage can be taken in Caleta Cayman, a small bight on the S side of the island near its W end, between the months of January and May.

The preferred channel leading into the gulf leads E and then N of English Rock.

The known dangers adjacent to or within the fairway N of English Rock are charted and some are marked by beacons.

**8.11** Isla Gobernadora (7°34'N., 81°13'W.), small in extent, with a 224m high peak, lies 1.5 miles N of the W part of Isla Cebaco. The peak on the island is an excellent landmark for vessels approaching from the W.

A pilot can be obtained at Isla Gobernadora.

Good, well-sheltered anchorage can be taken as convenient either N or S of Isla Gobernadora. If using the anchorage S of this island, care should be taken to avoid the shoal depths lying in mid-channel. S of the E end of the island.

The coast between Punta Duartes and Punta Mariato, 19 miles S, is indented by two small bays. Good anchorage is provided in both bays from January to May, but Bahia Arenas, the S bay, with depths of 9 to 37m, is preferred as better shelter is provided and the holding ground is good. Shoaling has been reported.

**Punta Naranjo** (7°15'N., 80°57'W.), a bluff headland lying 15 miles S of Punta Duartes and extending 2 miles W of the general line of the coast, is backed by a range of high hills. Islote Roncador (Isla Naranjas), a rocky, wooded islet, lies 1 mile off the point and a dangerous rocky shoal, with a depth of 2.1m, lies 1.3 miles farther WNW. This shoal is occasionally marked by breakers.

A bank, with a depth of 17.7m, lies 8 miles WNW of Punta Naranjo.

#### **Punta Mariato to Punta Mala**

**8.12 Punta Mariato** (7°12'N., 80°53'W.), a bold headland lying 4.3 miles SE of Punta Naranjo, marks the W extremity of a range of high coastal land that terminates to the E at Morro de Puercos. Two red patches on the headland are conspicuous when viewed from the S. The point is marked by a light.

**Morro de Puercos** (7°15'N., 80°26'W.), a lofty headland at the E end of the high coastal range, lies 27 miles E of Punta Mariato. The intervening coast is high and steep-to within 2 miles of the shore. Vessels rounding this point are advised to give it a wide berth. A vessel reported (1955) striking a submerged object, believed to be an uncharted rock, about 4 miles ESE of the point. Less water than charted has been reported to exist between this obstruction and the coast.

Shoals, with a depth of 9.5m, lie 4.3 miles ESE and 4.5 miles NE of Morro de Puercos. Strong tide rips have been observed 7 miles SSW of the point.

Morro de Puercos has been reported to be radar conspicuous. A light is shown from the point.

The coast between Morro de Puercos and Punta Mala, 30 miles ENE, sweeps to the NE to form two exposed bights. This section of coast is low and fronted to a considerable distance by moderate depths. Punta Guanico, 7 miles NE of Morro de Puercos, has been reported to be radar conspicuous.

The bight to the NE of Punta Guanico is fronted by shoal depths which extend up to 2.5 miles from the W shore, decreasing to a width of about 1 mile off the N shore to the W of Punta Raya, 9 miles NE of Punta Guanico.

**8.13 Frailes del Norte** (7°22'N., 80°10'W.), a small, barren, flat-topped islet surrounded by deep water, lies 5 miles SE of Punta Raya.

**Frailes del Sur** (7°20'N., 80°09'W.), an islet similar to Frailes del Norte and steep-to, lies 2.5 miles SSE. Both of the above islets are good landmarks in clear weather for vessels approaching Punta Mala. A light is shown from an 11m high, pyramidal tower situated on the N end of Frailes del Sur. Vessels passing Frailes del Sur are advised to give it a wide berth.

**Punta Mala** (Cabo Mala) (7°28'N., 80°00'W.), located 14 miles ENE of Punta Raya, is the W entrance point of the Gulf of Panama and is described in Sector 9.